

Emotional Tone Coding Using an Abbreviated Rating Scale

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Abstract

Introduction: The Emotional Tone Rating Scale (ETRS) is used to evaluate nursing communication with older adults in dimensions of care, respect, and control. Psychometric analysis of the original scale indicates that several of the 12 items overlap and that two, instead of three factors are indicated (control and person-centered). A scale was reduced to 8 items to diminish redundancy and reduce burden for raters.

Background: This Pilot Study is part of a larger research study entitled Changing Talk to Reduce Resistiveness to Dementia Care. The specific aim of the larger study is to improve staff communication with nursing home residents who have dementia to reduce resistiveness to care (RTC). The intervention is a three-session staff training program on communication skills associated with avoiding RTC. The ETRS is used to evaluate the communication skills.

Purpose: This study was conducted to evaluate whether the 8 and 12 item scales measure the same factors.

Theoretical Framework: The ETRS is designed to measure nursing communication based on concepts and theories of person-centered care for older adults.

Methodology: Twenty raters each listened to 20, 1 minute audio recordings of nursing home care, presented in a powerpoint presentation. These clips were previously rated using the 12-item scale. They rated the nurse's communication on the ETRS. Factor analysis was used to compare similarities of the original and abbreviated scales.

Findings: Factor analysis revealed that the 12-item scale data and the 8-item scale data resulted in highly comparable negative correlations between person-centered and controlling scales. Factor analyses of the original 12-item scale and the 8-item scale produce similar solutions.

Discussion: The two factors person-centered communication and controlling communication are similar with the shortened 8-item tool as with the previous 12-item scale the shortened version and will be used for future use. This shortened scale will help to reduce redundancies and rater burden.

Introduction

Literature Review

Research has been conducted to examine communication with older adults. The Communication Predicament of Aging Model (see figure 1) discusses how individuals adapt their communication styles when conversing with older adults (Ryan, Hummert, & Boich, 1995). This adaptation is done as a compensation method due to the stereotype of older adults being incompetent. The compensation methods used are oversimplified speech or baby talk. Research has shown that these communication styles negatively impact the self-esteem and psychosocial needs of older adults (Ryan, Hummert, & Boich, 1995). The Emotional Tone Rating Scale is a means of analyzing communication with older adults. Care providers can then be made aware of their behavior and educated to modify how they speak with older adults, thus reducing the negative consequences seen with oversimplified speech and baby talk.

Background

This Pilot Study is part of a larger research study entitled Changing Talk to Reduce Resistiveness to Dementia Care. The specific aim of the larger study is to improve staff communication with nursing home residents who have dementia to reduce resistiveness to care (RTC). The intervention is a three-session staff training program on communication skills associated with avoiding RTC. The ETRS is used to evaluate the communication skills.

The Emotional Tone Rating Scale is a tool used to analyze the qualities of communication with older adults. This scale can be used by nurses and nursing assistants to analyze and self-monitor their communication with older adults in a variety of settings

including long term care facilities and hospitals. The Emotional Tone Rating Scale was originally developed to measure affective qualities or dimensions of care, respect, and control that are frequently unbalanced in communication with older adults, especially in nursing home settings. The scale can be used by naïve raters without training and with high levels of agreement. However, psychometric analysis of the scale revealed two, not three dimensions. The two dimensions were named person-centered and controlling.

Original 12-item scale ratings demonstrated high levels of agreement = 0.95 and consistency = 0.95 with 2 factors, “person-centered” and “controlling” that explained 84.8% of the variance. “Person-centered” factor loadings ranged from 0.84 to 0.98 with a coefficient alpha of 0.98. “Controlling” factor loadings were -0.63 to .99 with a coefficient alpha of 0.94. The two factors were negatively correlated $p = -0.64$ and demonstrated good ranges, standard deviations, and high item-total correlations. The items addressed on the 12-item scale were: nurturing, directive, affirming, respectful, patronizing, supportive, polite, bossy, caring, dominating, warm, and controlling.

Purpose

To reduce rater burden and time to complete ratings, we sought to decrease the number of items in the scale. Also, redundant items were removed. The purpose of the Emotional Tone Rating Scale is to allow nurses and nursing staff to effectively analyze their communication with older adults. For this rating scale to be effective it needed to be easy to use and free of any burden. This research project reduced the original 12-item scale to the new 8-item scale.

Methodology

Twenty raters were recruited from a university medical center campus using signs posted in public areas and a social media post on the university Facebook page. These raters were selected on a first come first serve basis to participate in this human subjects committee approved research study. The average rater was a 22-year female Caucasian college student with older adult care experience (see table 1).

These twenty raters listened to twenty audio clips recorded during nursing home care sessions. These clips varied in length with the average length of time being one minute long. These clips were previously rated using the 12-item scale. The participants rated the nurse's communication using the 8-item Emotional Tone Rating Scale. The new 8-item scale included these items: directive, respectful, supportive, polite, bossy, caring, dominating, and controlling. The items that were eliminated from the previous scale were the items nurturing, affirming, patronizing, and warm. The items eliminated either did not fit within the selected dimensions or produced redundancy with other items. The five point Likert scale was used to evaluate to what degree the communication fit the 8 items (1= not at all; 5=Very).

The audio clips were heard by way of a Powerpoint presentation which made it easy for raters to progress through the audio clips. The presentation included each audio clip twice so the participants could accurately rate the communication. Following participation in the research session the participants were given \$25 Visa cards for their time and effort.

Results

Factor analysis revealed that the 12-item scale data (Williams, Herman and Bontempo, 2012) and the 8-item scale data resulted in highly comparable negative

correlations between person-centered and controlling scales (-0.6992 for 12-item and -0.6987 for 8-item data ratings respectively). These findings replicate the two-factor ETRS model suggested in earlier research (Williams, Boyle, Herman, Coleman and Hummert, 2012). Factor analyses of the original 12-item scale and the 8-item scale produce similar solutions. See Figure 2: 12-item Scale results and Figure 3: 8-item Short Form results.

Discussion

The Emotional Tone Rating Scale ratings are similar with both the original 12-item scale and the abbreviated 8-item scale, resulting in a distinct and easily interpreted two-factor solution. The controlling factor included the items controlling, dominating, and bossy. The person centered factor included the items caring, supportive, polite, and respectful. Further evaluation of the “Directive” item is needed due to cross factor loading. Using this shortened scale may reduce redundancies and rater burden. The Emotional Tone Rating Scale can be used to evaluate the use of person-centered communication between staff and residents in long term care facilities in research and clinical practice.

Acknowledgments

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Figure 1: Features and functions of patronizing communication within the Communication Predicament of Aging Model (Ryan, Hummert, & Boich, 1995, p. 147).

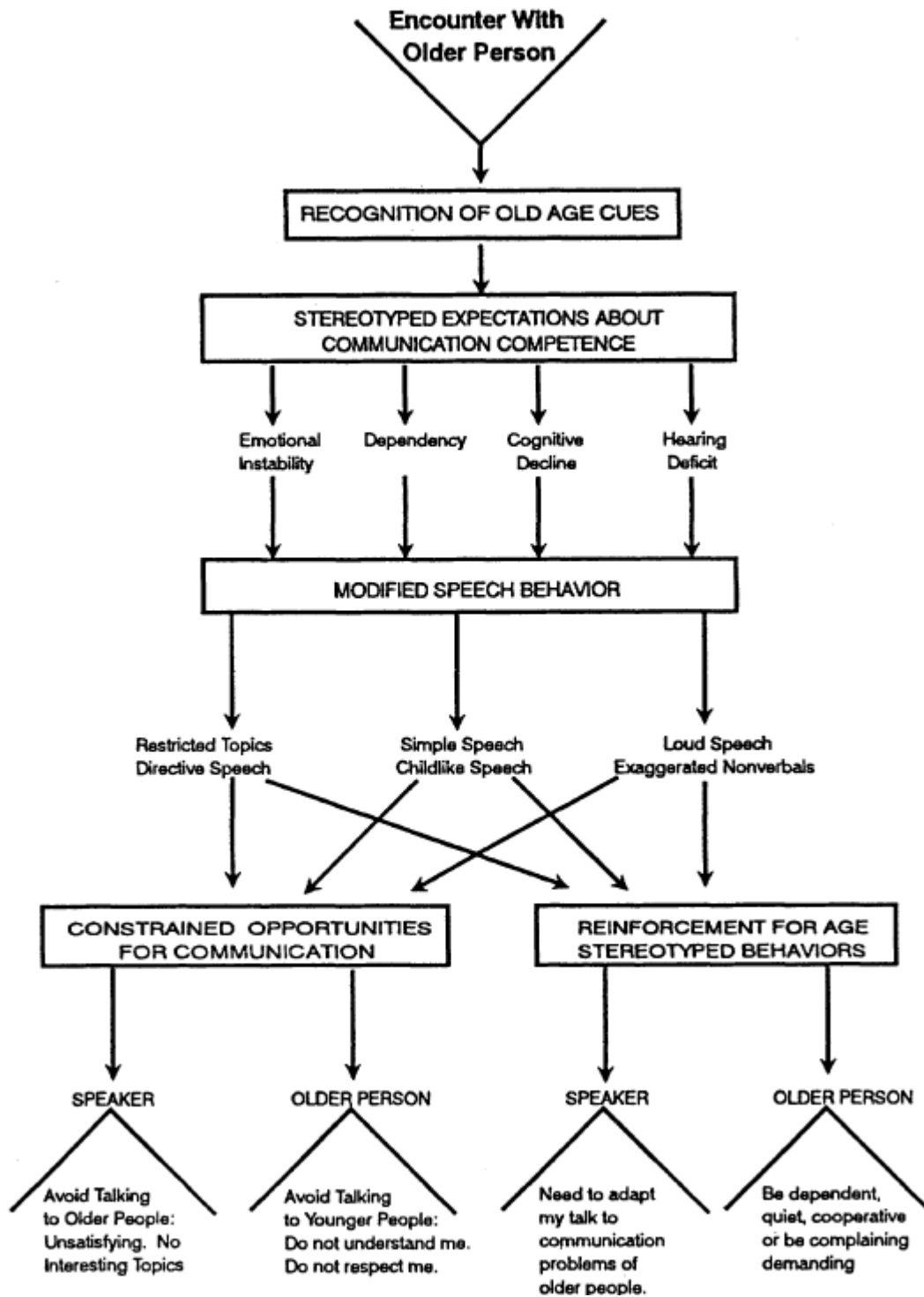
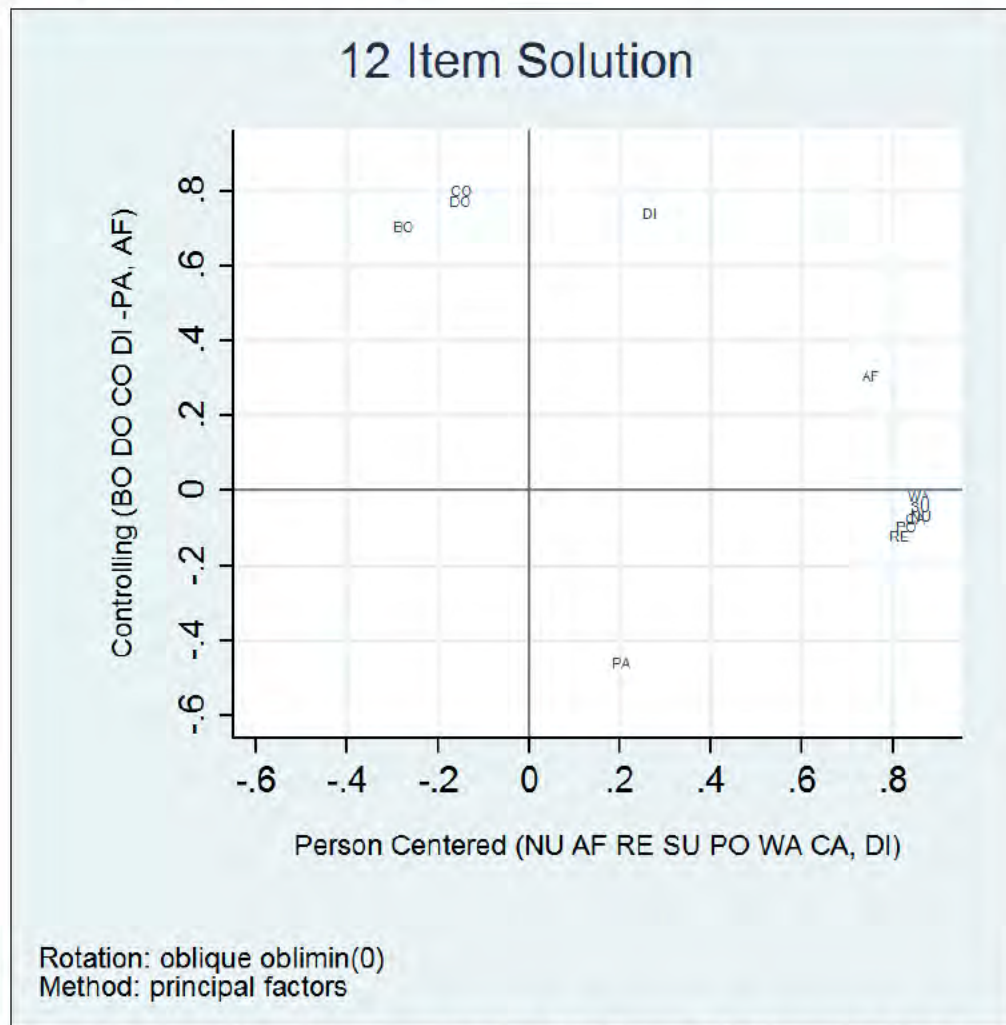


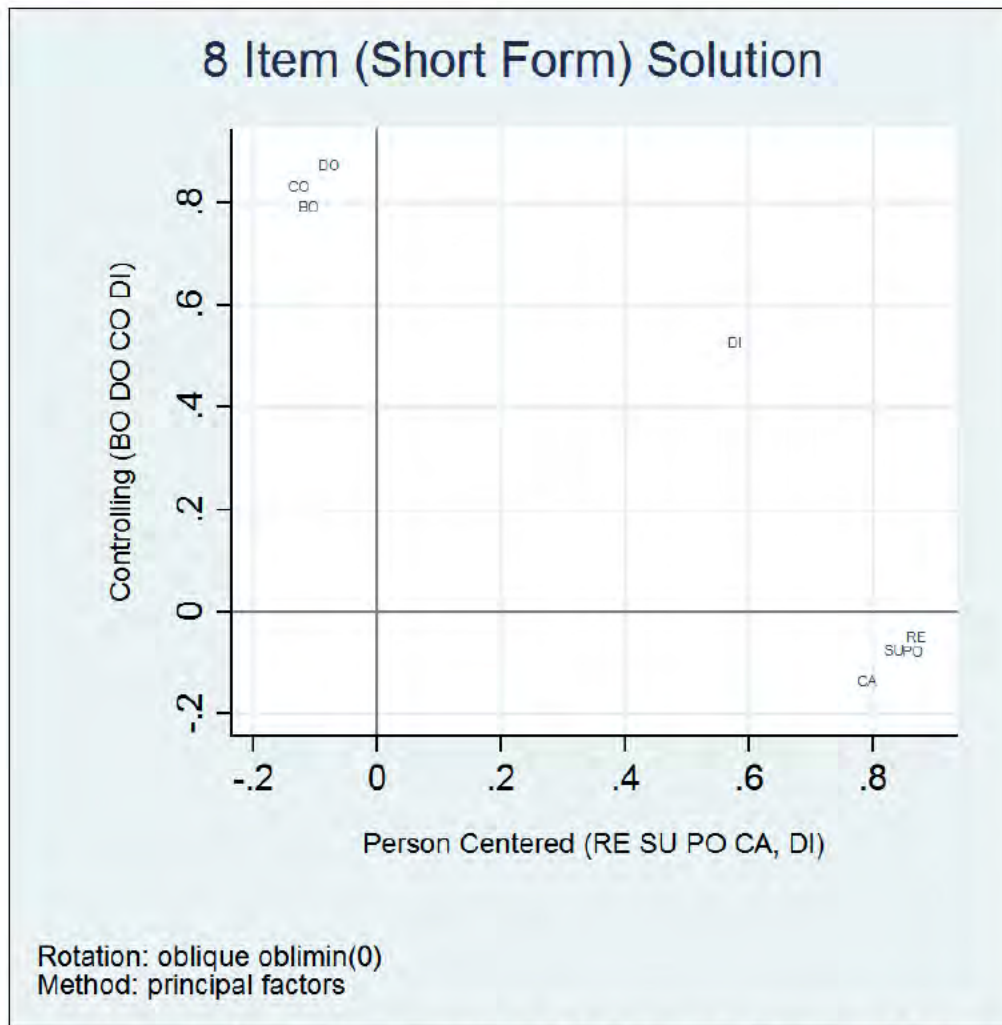
Table 1: Demographics of Raters

Age	Range of ages: 20-38 Average Age: 22.85
Race	White: 85% Asian: 10% Hispanic/Latino: 5%
Gender	100% Female
Highest Level of Education	College Sophomore: 25% College Junior: 65% Undergraduate degree: 10%
Previous experience working with older adults	80%

Figure 2: 12-item Scale Result

Key: CO= Controlling, DO= Dominating, BO=Bossy, DI=Directive, AF =Affirming, PA=Patronizing, NU=Nurturing, WA= Warm, CA=caring, SU=Supportive, PO=Polite, RE=Respectful

Figure 3: 8-item Short Form Results



Key: CO= Controlling, DO= Dominating, BO=Bossy, DI=Directive, CA=caring, SU=Supportive, PO=Polite, RE=Respectful

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